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VIA FAX AND US MAIL

June 22, 2004

Ms. Kelly Kifer
de maximis, inc.
1125 South Cedar Crest Blvd.
Suite 202
Allentown, PA 18103

RE: Review of PCBs Analytical Data for Sample BBD-WC-BLDG 8 SEPTIC

Dear Kelly:

On Thursday, June 17, 2004, at your request I reviewed raw data provided by EcoTest Laboratories, Inc., for the PCBs analysis of sample BBD-WC-BLDG 8 SEPTIC. Specifically, the sample chromatogram and quantitation report, chromatograms and quantitation reports for calibration verification standards for Aroclor 1016 and Aroclor 1254, the chromatogram and quantitation report for the associated method blank, and several quality control summary forms were faxed to me by the laboratory.

The laboratory identified the sample peak pattern as Aroclor 1254. This is a reasonable identification, based on comparison to the Aroclor 1254 standard chromatogram provided. There is no clear evidence for the presence of any additional Aroclors.

Based on their identification of the Aroclor present, EcoTest calculated the concentration of Aroclor 1254 in the sample using routine procedures. The five selected Aroclor 1254 peaks were integrated, used to calculate a measured concentration based on the initial calibration, and adjusted to reflect the sample preparation steps (aliquot size, final extract volume, and extract dilution) as well as percent moisture. A final, dry weight concentration of 43 parts per million (ppm) was reported for Aroclor 1254. I was not able to reproduce this result exactly with the raw data provided; however, based on my discussions with Tom Treutlein at EcoTest, I was able to verify that the correct calculation approach was used by the laboratory. Based on the Aroclor 1254 calibration verification standard response (rather than the initial calibration responses), my calculated concentration was within 7% of the laboratory-reported value. This is within experimental error, and

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suggests that the laboratory-reported value is valid.

The reporting limits (RLs) for the undetected target Aroclors reported by the laboratory (Aroclors 1016, 1221, 1232, 1242, 1248, and 1260) were elevated to 7.1 ppm (from 0.04 ppm) due to the 50-fold extract dilution performed and the low percent solids content (28%) of the sample. This was also correctly done by the laboratory, based on the information provided.

For disposal purposes (per TSCA), it is neither necessary nor correct to add the RLs for the undetected Aroclors to the reported positive result before comparing the concentration to the 50 ppm "non-PCB waste" limit. This kind of approach is *only* used for risk assessment purposes, and in those cases one-half the method detection limit (rather than the RL, which is generally much higher) is added to the reported positive result(s).

There is no technical validity to including the RLs in the reported "total PCBs" concentration. If there were, it would be virtually impossible to be below 50 ppm based on a PCB congeners analysis (there are 209 PCB congeners), or in an Aroclor analysis that required dilution due to interferences, regardless of whether any Aroclors were identified. There are also several additional Aroclors that could be analyzed that were not reported by EcoTest.

Unfortunately, the TSCA regulations (40 CFR 761) are very general with respect to this issue, and only specify that PCBs are to be measured using EPA Methods 3500B/3550B/8082 and reported on a dry weight basis as micrograms of PCBs per gram of sample (ppm by weight). It is further specified that PCBs are quantified based on the formulation of PCBs present in the material analyzed, e.g., Aroclors or congeners, as appropriate. There is nothing stating that RLs must be added to positive results to establish the "total PCBs" concentration of the sample.

I hope this information will be helpful to you. Please call me if you have any additional questions. It has been good to work with you again, even if only briefly!

Best regards,

Carol A. Erikson
Quality Assessment Manager

CAE/lrs
cc: J.S. Smith - Trillium
J. McBirney - de maximis